

administering the molecule to a non-human animal, and determining whether the molecule ameliorates the infectious disease in the treated animal.

71. (new) A method for identifying a molecule useful for the treatment of an autoimmune disease comprising carrying out the method of claim 51 or 52, further comprising the step of administering the molecule to a non-human animal, and determining whether the molecule ameliorates the autoimmune disease in the treated animal.

72. (new) The method of claim 51, 52, 69, 70 or 71 wherein the heat shock protein receptor is selected from the group consisting of an Hsp70 receptor, an Hsp 90 receptor, and a gp96 receptor.

73. (new) The method of claim 53, 52, 69, 70 or 71 wherein the heat shock protein receptor positive cells are purified from heat shock protein receptor negative cells.

#### REMARKS

According to the Office Action dated November 17, 2000, claims 1 to 52 are pending in the instant application. The Examiner has required a restriction to one of the following inventions:

- I. Claims 1-12, drawn to heat shock protein receptor positive cells and a method for isolation of said cells.
- II. Claims 13-20, drawn to heat shock protein receptor and a method for isolation of said receptor.
- III. Claims 21-27, drawn to an antibody to heat shock receptor protein and a method for making said antibody.
- IV. Claims 28-50, drawn to a sequence encoding heat shock receptor protein and a method for making said protein.
- V. Claims 51 and 52, drawn to a method for screening a molecule for activity to modulate heat shock receptor levels or activity.

In response to the Restriction Requirement, Applicant elects to prosecute Group V, which is drawn to a method for screening a molecule for activity to modulate heat shock receptor levels or activity.

By this amendment, claim 51 has been amended, and new claims 53-73 have been added, to more particularly point out and distinctly claim the subject matter of the elected invention. Claims 1 to 50 have been canceled, without prejudice. A marked-up version of the claim amendments is attached hereto as Exhibit A, indicating deleted matter by brackets and added matter by underlining. The new and amended claims recite the subject matter of elected Group V, and as such, should be searched and examined in the present application.

The new and amended claims are fully supported in the specification and claims as originally filed. For example, support for the amendments and new claims can be found throughout the specification, see, *e.g.*, page 72, line 1 to page 84, line 5, and in the claims as originally filed. As such, Applicant asserts that no new subject matter, as defined in 35 U.S.C. § 132, has been added with the amendments and addition of new claims.

Therefore, claims 51 to 73 will be pending upon entry of the amendment. A copy of the claims as pending upon entry of the present amendment is attached hereto as Exhibit B. Applicant respectfully requests that the present amendment and remarks be made of record in the instant application. An early allowance of the application is earnestly requested.

Respectfully submitted,

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Enclosures

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EXHIBIT A: MARKED-UP VERSION OF AMENDED CLAIM

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51. (amended) A method for screening a molecule for the ability [activity] to modulate heat shock protein receptor [levels or] activity comprising:

- (a) contacting cells with the molecule; and
- (b) comparing the level of heat shock protein receptor [protein, mRNA or] activity in cells contacted with the molecule to the amount of heat shock protein receptor [protein, mRNA, or] activity[,] in cells not so contacted,

wherein an increase or decrease in the amount of heat shock protein receptor [protein, mRNA, or] activity in the contacted cells relative to the amount of heat shock protein receptor [protein, mRNA, or] activity in the cells not so contacted indicates that the molecule has the ability [activity] to modulate heat shock protein receptor [levels or] activity.



EXHIBIT B: PENDING CLAIMS  
APPLICATION NO. 09/411,075 ATTY. DOCKET NO. 8449-054-999  
(as amended)

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51. A method for screening a molecule for the ability to modulate heat shock protein receptor activity comprising:

- (a) contacting cells with the molecule; and
- (b) comparing the level of heat shock protein receptor activity in cells contacted with the molecule to the amount of heat shock protein receptor activity in cells not so contacted,

wherein an increase or decrease in the amount of heat shock protein receptor activity in the contacted cells relative to the amount of heat shock protein receptor activity in the cells not so contacted indicates that the molecule has the ability to modulate heat shock protein receptor activity.

52. A method for screening a molecule for activity to modulate, directly or indirectly, the ability of heat shock receptor positive cells to stimulate the activation of cytotoxic T cells *in vitro* comprising:

- (a) adding the molecule to a mixture of heat shock protein receptor positive cells and cytotoxic T cells under conditions conducive to the activation of cytotoxic T cells; and
- (b) comparing antigenic cell cytotoxicity of said T cells with the cytotoxicity of T cells that are formed in the absence of said molecule,

wherein a lower or higher degree of cytotoxicity indicates that the molecule modulates the activation of cytotoxic T cells.

53. The method of claim 51 wherein the cells are heat shock protein receptor positive cells.

54. The method of claim 52 or 53 wherein the heat shock protein receptor positive cells are macrophage or dendritic cells.

55. The method of claim 51 wherein the level of heat shock protein receptor activity is assayed by measuring the ability of the molecule to bind to the heat shock protein receptor positive cells.
56. The method of claim 51 wherein the level of heat shock protein receptor activity is assayed by measuring the ability of the molecule to modulate the binding of a heat shock protein or a heat shock protein-peptide complex to the cells.
57. The method of claim 56 wherein the molecule increases the binding of the heat shock protein or the heat shock protein-peptide complex to the cells.
58. The method of claim 56 wherein the molecule decreases the binding of the heat shock protein or the heat shock protein-peptide complex to the cells.
59. The method of any one of claims 56 to 58 wherein the heat shock protein is an Hsp70, an Hsp 90, or gp96.
60. The method of claim 51 wherein the heat shock protein receptor activity is the ability to interact with a heat shock protein receptor antibody.
61. The method of claim 51 wherein the level of heat shock protein receptor activity is assayed by measuring antigen presentation.
62. The method of claim 61 wherein measuring antigen presentation is carried out by measuring representation of a peptide by an MHC molecule.
63. The method of claim 51 or 52 wherein the molecule is a peptide or protein, or derivative, analog or fragment thereof.
64. The method of claim 63 wherein the peptide is a member of a peptide library.
65. The method of claim 51 or 52 wherein the molecule is a small organic molecule, a nonpeptide, or an antibody.

66. The method of claim 65 wherein the nonpeptide is a member of a nonpeptide library.
67. The method of claim 66 wherein the small organic molecule is a member of a small molecule library.
68. The method of claim 51 or 52 wherein the molecule is attached to a solid surface.
69. A method for identifying a molecule useful for the treatment of cancer comprising carrying out the method of claim 51 or 52, further comprising the step of administering the molecule to a non-human animal, and determining whether the molecule alters tumor progression in the treated animal.
70. A method for identifying a molecule useful for the treatment of an infectious disease comprising carrying out the method of claim 51 or 52, further comprising the step of administering the molecule to a non-human animal, and determining whether the molecule ameliorates the infectious disease in the treated animal.
71. A method for identifying a molecule useful for the treatment of an autoimmune disease comprising carrying out the method of claim 51 or 52, further comprising the step of administering the molecule to a non-human animal, and determining whether the molecule ameliorates the autoimmune disease in the treated animal.
72. The method of claim 51, 52, 69, 70 or 71 wherein the heat shock protein receptor is selected from the group consisting of an Hsp70 receptor, an Hsp 90 receptor, and a gp96 receptor.
73. (new) The method of claim 53, 52, 69, 70 or 71 wherein the heat shock protein receptor positive cells are purified from heat shock protein receptor negative cells.